**Shapes of molecules**

**QUESTION: For each of the molecules shown in the table**

**i) draw a 3dimensional (3D) arrangement of the atoms in each molecule**

**ii) name the shape of each molecule**

**iii) state the bond angles**

|  |  |  |
| --- | --- | --- |
| **CH4** | **AsH3** |  |
| **PH3** | **CO2** | **H2CO** |
| **O2** | **CH3Br or CH3Cl** | **SO2** |
| **H2O** | **CH2Br2 or CH2Cl2** | **CS2** |
| **XO2**  **(where X has 4 valence electrons)** | **YO2**  **(where Y has 6 valence electrons)** | **NCl3** |
| **PBr3 or PCl3** | **H2S** | **COCl2** |
| **OCl2 aka Cl2O** | **SiCl4** | **HCN** |
| **SF2** | **F2O** |  |

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